



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,605	01/29/2004	Charlie Steinmetz	200314315	1603

7590 11/15/2005

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

MARTIN, LAURA E

ART UNIT	PAPER NUMBER
----------	--------------

2853

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Ex

Office Action Summary	Application No.		Applicant(s)	
	10/770,605		STEINMETZ ET AL.	
	Examiner		Art Unit	
	Laura E. Martin		2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 56-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 56-69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 29 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/29/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 56-60, 62, 63, 65, 67-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al. (US 5734401) in view of Wu et al. (US 6059401).

Clark et al. teaches a printing-fluid container (24) having a front face (16) formed by a single structural piece including a top edge, a bottom edge, a right edge, and a left edge (figure 6); a body (24) including a latching surface (72) spaced rearward the front face but intermediate the front face and rear portion and substantially parallel to the front face, wherein the front face and the body are exterior an inner cavity; an air interface (34) passing into the inner cavity through the front face proximate the top edge and distal the bottom edge; a printing-fluid interface (32) passing into the inner cavity through the front face proximate the top edge and distal the bottom edge; a first recessed portion (20) of the front face intermediate the air interface and the printing-fluid interface and proximate the air interface; and a second recessed portion (38) of the front face intermediate the air interface and the printing-fluid interface and proximate the printing-fluid interface; a third recessed portion (40) of the front face intermediate the first recessed portion and the right edge and a fourth recessed portion (46) of the front face intermediate the second recessed portion and the right edge, wherein the first

recessed portion, second recessed portion, third recessed portion, and fourth recessed portion extend into the inner cavity; a free volume of printing fluid held within the inner cavity (10) defined by the front face and the body (24). Clark et al. does not teach an off-axis printing-fluid container, a rear portion with less width than the width of the front face, or a protruding portion.

Wu et al. teaches an off-axis printing-fluid container configured to hold a volume of fluid (C2, L21-25); a body including a rear portion having a width less than a width of the front face (figure 4); and a bottom edge including a protruding portion extending away from the top edge and aligned with the air interface (figure 4), the first recessed portion, the second recessed portion, and the printing-fluid interface (40 – multiple recessed nozzles).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosures of Clark et al. and Wu et al. in order to improve the ink cartridge quality.

Claims 61 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al. (US 5734401) and Wu et al. (US 6059401), in further view of Childers et al. (US 6322205).

Clark et al. and Wu et al. teach the apparatus of claim 56; however, neither teach an electrical interface.

Childers et al. teaches an electrical interface (54) on the front face intermediate a first recessed portion and the left edge (figure 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the disclosures of Clark et al. and Wu et al. with that of Childers et al. in order to improve printing quality.

As per claims 64 and 66, Clark et al. and Wu et al. disclose the claimed invention except for a first recessed portion and a second recessed portion extending at least approximately 15 millimeters into the inner cavity and a third recessed portion and a fourth recessed portion extending at least approximately 12 millimeters into the inner cavity. It would have been obvious to one having ordinary skill in the art at the time the invention was made to extend the first recessed portion and the second recessed portion at least approximately 15 millimeters into the inner cavity and extend the third recessed portion and the fourth recessed portion at least approximately 12 millimeters into the inner cavity, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

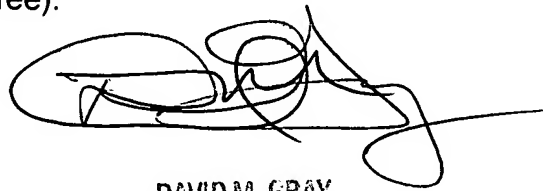
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura E. Martin whose telephone number is (571) 272-2160. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David M. Gray can be reached on (571) 272-2119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2853

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura E. Martin

A handwritten signature in black ink, appearing to read 'D. M. Gray', with a long horizontal line extending to the right.

DAVID M. GRAY
PRIMARY EXAMINER